

tion of three different models and numerous alterations and artistic refinements at each of these stages. The architects, Janssen and Cocken, first had made a model of the entire building to a scale of $5/32$ in. to 1 ft. Then, after study and many changes in details, a larger model of a portion of the building was constructed to a scale of $3/4$ in. to 1 ft. Finally, it was decided to erect in the country near Pittsburgh a full-size model in stucco of a corner and two columns of the building; this model, about 90 ft. high and 40 ft. long, enabled the architects to determine the particulars of the most appropriate adornment of the building. A number of improvements in form and ornament of the columns and entablature were in fact accomplished in this manner. Similar caution and certainty, through experimental study and practical trial,

are guiding H. S. Coleman, the institute's engineer, and the architects in solving problems encountered in the construction of the interior of the building and especially of the laboratory rooms. To facilitate dependable results in this planning, the institute erected a temporary, one-story structure, 45 ft. x 50 ft., in which two different sized laboratories, completely equipped, were built, and in which aluminum sash, various wall and flooring materials and different types of radiators have been installed and put to test. This "proving house," which has been making it comparatively easy to get early answers to constructional questions of importance, including problems of plumbing, electrical layout and lighting arrangements, will be open during the Pittsburgh meeting.

W. A. HAMOR

SCIENTIFIC NOTES AND NEWS

THE autumn meeting of the National Academy of Sciences will be held at Cleveland under the presidency of Dr. W. W. Campbell on November, 19, 20 and 21.

THE fifteenth International Physiological Congress will take place at Leningrad and Moscow from August 9 to 17, 1935. Professor Ivan P. Pavlov, who celebrated his eighty-fifth birthday on September 14, has been elected president of the congress. Board and lodging will be provided for members and arrangements will be made for visits to several parts of the country at reduced rates.

At the Aberdeen meeting of the British Association for the Advancement of Science, it was agreed that the meeting at Norwich next year, under the presidency of Dr. W. W. Watts, should be held from September 4 to 11. Invitations have been accepted from Blackpool for 1936 and from Nottingham for 1937. An invitation from Cambridge City and University to hold the meeting of 1938 in Cambridge was accepted. A deputation was received from the City of Dundee and the University of St. Andrews, with its branch in Dundee, to hold the meeting of the association in Dundee in 1939 or 1940, the alternative having been given in view of a possible visit of the association to one of the Dominions in one of these years.

COLONEL SIR CHARLES CLOSE, vice-president of the Royal Geographical Society, was elected president at the fourteenth meeting of the International Geographical Union, held in Warsaw from August 23 to 31. He succeeds Dr. Isaiah Bowman, chairman of the National Research Council and director of the American Geographical Association. There were 887 delegates representing 44 countries at the meeting.

France had 102 delegates, the British Empire 58 and Germany 50. The fifteenth congress will be held at Amsterdam in 1938. Sir Charles, who retired from the army in 1922, was president of the British Geographical Association in 1927 and president of the Royal Geographical Society from 1927 to 1930.

At the fifty-second meeting of the American Astronomical Society held at Connecticut College from September 10 to 12, the following officers and members of the council were elected: *President*, H. N. Russell; *Vice-president*, C. A. Chant; *Secretary*, R. S. Dugan; *Treasurer*, F. C. Jordan; *Councilors*, Cecilia Payne Gaposchkin, W. E. Harper, J. H. Moore and R. E. Wilson. H. R. Morgan was elected a representative of the society on the Division of Physical Sciences of the National Research Council.

DR. FRANK E. BURCH, of St. Paul, Minn., was chosen president-elect of the American Academy of Ophthalmology and Otolaryngology at the annual conference held in Chicago from September 10 to 14, and Dr. Wells P. Eagleton, of Newark, N. J., became president. The medal of honor was awarded to Dr. Carl Koller, of New York, who first introduced cocaine as a local anesthetic fifty years ago.

DR. WALTER L. BIERRING, of Des Moines, Iowa, president of the American Medical Association, was the guest of honor at a dinner on September 4, sponsored by the Los Angeles County Medical Association.

THE University Award granted by Rutgers University for distinguished services was presented on September 18 to Albert E. Meder, associate professor of mathematics at the New Jersey College for Women.

DR. EUGEN FISCHER, professor of anthropology at Berlin, has been awarded the Rudolf-Virchow plaque.

DR. WALTER AND DR. IDA NODDACK, Berlin, have been awarded the Scheele Medal of the Swedish Chemical Society.

THE Paul Ehrlich gold medal was awarded to Dr. Walter Kikuth at a medical meeting held at Frankfurt a/M, from September 2 to 9, under the presidency of Professor W. Kolle. Dr. Kikuth is head of the chemotherapeutic department of the I. G. Farbenindustrie at Elberfeld, where he succeeded the late Dr. Roehl.

PROFESSOR GEORG GAMOW, head of the department of physics and mathematics at the Polytechnic Institute at Leningrad, has been appointed visiting professor at the George Washington University for the coming year. During the summer Dr. Gamow was a foreign visiting member at the twelfth annual physics symposium of the summer session of the University of Michigan. At George Washington University he will give a seminar in theoretical physics and will continue his research on the atomic nucleus.

DR. FREDERICK CLARK HOLDEN, who has been associated with University and Bellevue Hospital Medical College since 1919, has retired as professor of obstetrics and gynecology and has been appointed professor emeritus.

CHARLES J. FISH, director of the Buffalo Museum of Science, has joined the department of zoology at the Rhode Island State College, Kingston.

UNDER the direction of Vladimir P. de Smitt, hydrographer of the Western Union Telegraph Company, who charts the course of ocean cables, an extension course on weather forecasting will be given this year at Columbia University.

DR. HUGH P. BAKER, president of the Massachusetts State College, has been appointed a member of the advisory committee of the New England Regional Planning Commission. The commission, of which Victor M. Cutter is chairman, is a division of the National Resources Board. Dr. Baker, who was formerly dean of the N. Y. State College of Forestry at Syracuse University, has previously served in an advisory capacity to the Westchester Park Commission and other planning activities. He will make accessible to the committee material available in various college departments.

DR. F. S. BRACKETT has tendered his resignation from the Smithsonian Institution in order to devote more time to the investigation of physical problems in connection with agriculture.

DR. JOSEPH S. AMES, president of the Johns Hopkins University, who has been traveling for five weeks in England and Germany, arrived in New York on September 19.

DR. HANS JENNY, associate professor of soils at the University of Missouri, has a year's leave of absence which he plans to spend in work with Dr. W. P. Kelley, agricultural chemist at the Citrus Experiment Station of the University of California.

AT the annual meeting of the Northern Minnesota Medical Association at Brainerd, under the presidency of Dr. A. C. Baker, of Fergus Falls, the evening address on September 10 was an illustrated lecture entitled "Minnesota Man," by Dr. Albert Ernest Jenks, professor of anthropology at the University of Minnesota.

THE Lowell Institute, Boston, has announced eight courses of lectures during the present season. These include a course of seven illustrated lectures by Dr. Cecil K. Drinker, professor of physiology and assistant dean of the Harvard School of Public Health, on "Health, Medicine and Doctors in Colonial Days, as Depicted in the Diary of Elizabeth Drinker, 1758-1807." Dr. Drinker's lectures will be given on Tuesdays and Thursdays, at eight o'clock, beginning on October 16. A course of eight illustrated lectures will be given by Dr. James Bernard Macelwane, professor of geophysics and director of the department of geophysics at Saint Louis University, on "Some Old Seismological Problems and Recent Solutions." These lectures have been announced for Fridays and Tuesdays, at eight o'clock in the evening, beginning on February 1 and omitting February 22.

IN order that methods of carrying on research with pastures and pasture crops might be standardized and results more accurately measured, the American Dairy Science Association last year appointed a committee consisting of I. R. Jones, Oregon; G. Bohstedt, Wisconsin; C. B. Bender, New Jersey; R. B. Becker, Florida, and R. H. Lush, Louisiana, *chairman*. The committee presented a report of progress at the recent meeting of the American Dairy Science Association held in Ithaca, N. Y., from June 25 to 28. Copies of this report are available from the office of Professor Lush, who has been authorized to cooperate with the chairman of similar committees previously appointed by the American Society of Agronomy and the American Society of Animal Production to compile a joint report on "Methods of Pasture Investigations." A final report will be made some time next year.

THE plenary Congress of the International Scientific Radio Union opened in the rooms of the Royal Society, London, on September 11. The union is one of a group of bodies organized in connection with an international council for the furtherance of international cooperation in scientific research. Previous meetings have been held in Washington, Brussels and

Copenhagen. The work of the union is divided into five commissions dealing, respectively, with radio standards, propagation of waves, atmospherics, liaison with amateurs, etc., and radio-physics. The delegates were entertained by the government at a dinner at Grosvenor House on September 18, at which Sir Kingsley Wood, postmaster-general, presided. Further arrangements included a visit to the Rugby and Baldock wireless stations, the radio department of the National Physical Laboratory and the Broadcasting House. On September 17 the delegates attended a reception at the Royal Institution, at which Sir William Bragg gave a short address on the work of Michael Faraday, illustrated by some of the original apparatus used by Faraday.

ACCORDING to *Nature*, an article by Professor P. A. Molchanov in the *Moscow News* reports that the recent All-Union Conference for the Study of the Stratosphere decided to call an international conference, with the same objects to meet in the U.S.S.R. in 1936, the date to be fixed in relation to the total solar eclipse. The Soviet conference of last spring was mainly devoted to a review of the present state of knowledge of the problems of the extra-tropospheric regions of the atmosphere, with some references to their relation to the meteorological processes of the troposphere. The conference passed resolutions dealing with the world conference and with the special need of cooperation among Soviet, American and Canadian scientific workers in polar atmospheric researches.

AN International Museums Conference at Madrid will be held from October 14 to 20. Headquarters will be at the Academy of Fine Arts. A session will be held at Barcelona on October 21.

THE prospectus of courses, lectures and other educational advantages offered to members of the Brooklyn Botanic Garden and to the general public for the educational year 1934-35 has just appeared as the October issue of the Brooklyn Botanic Garden *Record*. Twenty-one courses are offered for adults. Of these courses nine are especially for teachers and have been accepted by the Brooklyn Teachers Association and the New York Board of Education for credit toward higher teaching licenses. In addition, the course for student nurses which has been given for a number of years in cooperation with the training schools for nurses of a number of Brooklyn hospitals is offered again this year. Nine different courses are offered primarily, for boys and girls between the ages of eight and eighteen. The "Prospectus" also includes announcement of opportunities for research under direction and for independent investigation. In this connection the Botanic Garden is in official cooperation with New York University and Long Island University. General statements are given concerning the

other educational activities and features of the Botanic Garden, including press releases, broadcasting, popular and technical publications and guide books.

By the will of the late Nathaniel Lord Britton half of his residual estate is left to the New York Botanical Garden, the Torrey Botanical Club, the Staten Island Institute of Arts and Sciences, Columbia University and the New York Academy of Sciences.

THE new wing of the Sir John Cass Technical Institute, London, will be opened by the Earl of Athlone, chancellor of the University of London, on October 10. The extension of the institute building was made possible when the governing body acquired from the corporation of London the long lease of 2,000 years of adjoining properties. The new site measures approximately 5,000 square feet, and has allowed the frontage of the institute to be extended by about 75 feet. The new wing, designed by Mr. Verner O. Rees, comprises a large hall (with stage), a refectory and kitchen, a staff common room, three large art-rooms and additional laboratories and lecture-rooms for metallurgy, physics, organic and biochemistry. The increased floor space has enabled the governors to rearrange the interior of the original building and to provide a library and reading room, a students' common room, a block of administrative offices, a geology classroom and museum, an engraving room, a research laboratory, an enlarged laboratory for inorganic and physical chemistry and laboratories for metallography and pyrometry, assaying and mechanical testing.

DURING June, July and August, Smith College continued its program of field studies in geology under the direction of Howard A. Meyerhoff and Robert F. Collins. The Black Hills of South Dakota was again the center of field operations. A correspondent writes that "among the several research problems which were given special attention, considerable progress was made on the stratigraphic subdivision of the Deadwood formation. With the cooperation of Christina Lochman, faunal zones have been differentiated throughout the entire formation, and the paleontological collections have been materially enlarged as a result of the season's work. A study of the contact between the Pahasapa limestone (Mississippian) and the overlying Minnelusa formation (Pennsylvanian) was also started. The pre-Minnelusa solution phenomena in the Pahasapa limestone and the lateritic features of the re-worked soil at the base of the Minnelusa suggest an epoch of tropical weathering and the development of karst topography before Pennsylvanian sedimentation began. A reconnaissance of the Tertiary deposits of southeastern Wyoming, with particular attention to the mammalian remains, concluded the summer's work."